

after the fire

Some Notes About Seeding Grasses Following Wildfire

Seeding grasses following wildfire has become very controversial over the past several decades and yet it seems to be the first thing people think of after fire has burned their properties. Be cautious because seeding, especially in wildland areas, can be a waste of time, money and effort and/or can provide a false sense of security (ref. USFS GTR 83 “Evaluation the Effectiveness of Postfire Rehab Treatment”). Before you decide to plant grass seed (especially non-native grass) on wildfire damaged soil and slopes consult with the USDA Natural Resources Conservation Service (NRCS), local Resource Conservation District (RCD) or Certified Professional Erosion and Sediment Control Specialist (CPESC).

Potential Positive Effects of Seeding Grasses in Wildfire Areas

- Native or sterile non-native grasses can reduce non-native invasive plant encroachment by competition.
- Seeding can increase infiltration and reduce surface runoff and resulting soil erosion.
- Seeding may be used purposely to reduce shrub regrowth on range and pasture lands.
- Seeding with proper: grasses; seedbed preparation; location; and care and maintenance according to a professionally prepared seeding specification by NRCS, RCD or other experts can help reduce runoff, surface erosion, and sedimentation in the first and/or second winter following wildfire depending on soil/site conditions, seed selection, time of planting, irrigation availability, seedbed protection, etc.

Potential Negative Effects of Seeding Grasses in Wildfire Areas

- Grasses are herbaceous with annuals having shallow root systems and have little to no effect on slope stability. In fact, grasses increase infiltration which can have a negative effect where slopes are prone to sliding. Seeding, especially on slide prone slopes can increase the potential of slope saturation and risk of debris flows.
- Seeding competes with and/or slows down regeneration of pre-existing native vegetation.
- Seeding uses up more ground moisture and reduces regrowth of native plants that regenerate from resident seed bank in the soil.
- Seeding has been shown to provide marginal effects/results in the first year following fire or not at all and no significant effect when slower native perennials are the plant of choice in the first year.
- Seeding may have long term negative effects on the ecosystem by changing plant community composition over time.
- Seeding is usually not cost effective and does not guarantee safeguard to human life or property.
- Seeding can attract pocket gophers leading to more opportunities for soil piping and “dry erosion”. Studies shows that seeding can increase pocket gopher activity by 4.5%.
- Seeding that is successful, especially in the unburned wildland interface, can become a fire hazard in following fire seasons.
- Seeding can give property owners a false sense of security.
- Reseeding annual or perennial grasses are not the climax species in a woodland or shrub land plant community and therefore may delay natural regeneration even longer. Seeded grasses would also compete with native pioneering grasses and forbs.
- Native grass seeding may cause gene pollution of resident native grasses especially if the grasses sowed were of different gene types and collected in other areas of the state.
- Seedbed preparation can cause disturbance to slopes, soil, pre-existing vegetation/seedbank, etc.